

RFA050-2-70

RF Amplifier



0321

The RFA050-2 contains a pair of class-A solid-state RF amplifiers and is designed to operate with *ISOMET* multi-output frequency synthesizers. Each output will deliver up to 70 Watts power across a frequency bandwidth of 35 to 65 MHz. The RFA050-2 is intended for use with dual input beam steered deflectors.

Each amplifier channel requires up to 0dBm (1mW) RF input at the desired output frequency. There is no gain adjustment. The RF power and amplitude modulation are determined by the input source. The design includes over temperature and high reflected power protection.

SPECIFICATIONS

Power Out :	65 Watts Maximum CW into 50Ω
Load VSWR:	< 2.5:1 for best results
Output RF Power Variation vs. freq':	≤ 1 dB over specified bandwidth
Spurious Outputs:	Harmonics > 20dB below fundamental
3dB Bandwidth	35-65MHz minimum
RF input:	3dBm max
Gain:	> 40dB
Input Impedance:	50 ohm (nominal)
RF Amplitude rise/fall time	< 150nsec typical (input dependent)
DC Power Input:	+24V to 28Vdc* at <15A regulated to ± 0.25%
Temperature Range:	0°C to 60°C ambient temperature. Mounting face must not exceed 70°C.

* +28Vdc supply will give increased maximum RF power

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
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Quality Assured.
In-house: RF & Digital design
Software Development
OEM manufacture



RFA050-2-70

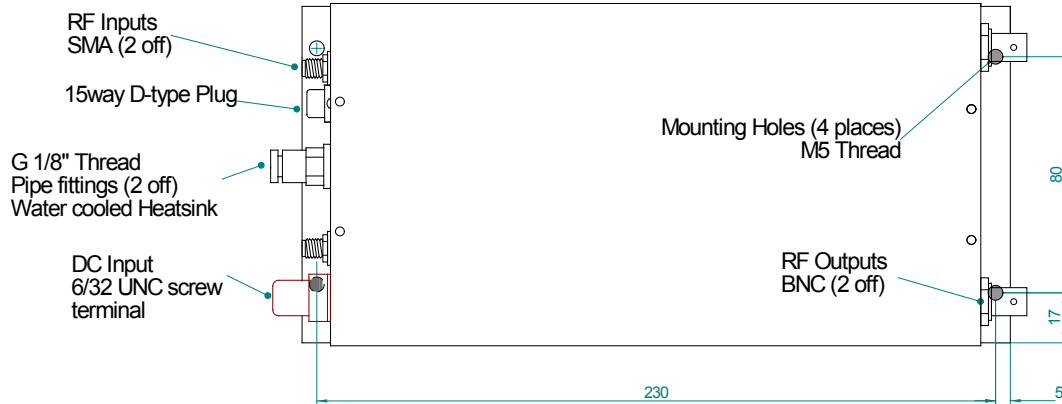
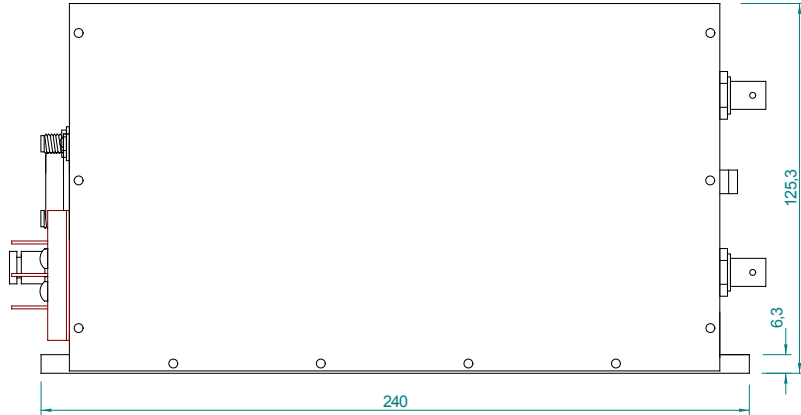
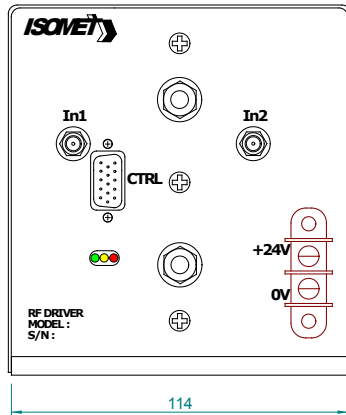
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OUTLINE DRAWING

Dim'n mm



Control signals on 15 pin high density 'D' type (compatible with IMS4-L(P) J5 output) :

pin	signal	pin	signal	pin	signal
1	+5V OUT	6	reserved	11	reserved
2	reserved	7	0V out	12	Interlock Monitor OUT
3	reserved	8	reserved	13	reserved
4	0V OUT	9	Amplifier Enable (-Gate) IN	14	reserved
5	reserved	10	+5V out	15	reserved

DO NOT connect to reserved pins

Options – BR : Brass water cooled heatsink

Refer application note AN1606 regarding Coolant Specification

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